

KENWOOD

Listen to the Future



TK-7180(H)/8180(H)

VHF/UHF FM Mobile Radios

FleetSync®
by KENWOOD

GENERAL FEATURES

- 30/50 W (136-174 MHz)
- 30/45 W (450-520, 400-470 MHz)
- Conventional & LTR® Zones
- MPT1327 Trunking Option
- Remote Control Head Option¹
- 12 Character Alphanumeric Aliases
- Backlit Dot Matrix LCD
- 3-Digit Sub-Display
- Function / Status LCD Icons
- RSSI Indicator
- Date & 12/24 Hour Time Clock
- Transmit / Busy / Call Alert / Warn LED
- 6 Backlit PF Keys
- Emergency / AUX Key
- Enhanced Kenwood Audio
- Front Panel Speaker
- Companded Audio
- Voice Inversion Scrambler Built-in
- Easy Option Port
- Encryption / ANI Board Control
- VGS-1 Voice Guide / Storage Option
- Emergency Call Features
- DTMF Encode / Decode²
- Special Alert Tone Patterns³
- Call Key⁴
- Time Out Timer

- Busy Channel Lockout
- Timed Power Off
- DB-25 Accessory Connector⁵
- 9 Programmable AUX I/Os⁵
- 2 Programmable AUX Outputs⁵
- Ignition Sense⁶
- Public Address / Horn Alert Option⁷
- MIL-Spec Standard Mic
- MIL-Spec 12-Key DTMF Mic Option
- Windows® Programming & Tuning⁸
- Windows® Firmware Uploading⁸
- Front Panel Test / Tune
- Cloning
- MIL-STD-810 C/D/E/F
- MIL-STD "Driven-Rain"⁹
- IP-54/55 Water & Dust Intrusion⁹

CONVENTIONAL ZONES

- 512 Channels / 128 Zones¹⁰
- QT / DQT
- Two-Tone Decode¹¹
- Single / Two-Tone Encode¹¹
- Operator Selectable Tone¹¹

- Dual Priority Scan
- Single & Multi-Zone Scan
- List Scan

TRUNKED ZONES

- 512 GID / 128 Zones¹⁰
- Kenwood LTR® Features¹²

FleetSync®

- FleetSync® or FleetSync® II¹³
- PTT ID Digital ANI
- Selective Call & Group Call
- Status Messaging
- Emergency Status
- Caller ID Display
- Short & Long Text Messages¹⁴
- Power On/Off Status Messages
- Input / Output Status Messages
- FleetSync® GPS Ready¹⁵
- Send GPS PF Key¹⁵
- PTT ID & Emergency GPS Reporting¹⁵
- Status Message Block GPS Reporting¹⁵
- Ignition On/Off GPS Reporting¹⁵,¹⁶
- VGS-1 GPS Data Storage¹⁵,¹⁶
- PC Serial Interface



Options

KMC-35 Microphone (supplied microphone)	KCT-40 Radio Interface Cable (for KDS-100, KGP-2A/2B)	KES-3 External Speaker	KPS-15 DC Power Supply
KMC-36 Keypad Microphone	KCT-23M DC Cable (Dash mount / 10 feet)	KES-5 External Speaker (requires KAP-2)	KDS-100 Mobile Data Terminal
KMC-9C Control Station Desktop Microphone	KCT-23M3 DC Cable (Remote mount / 23 feet)	KMB-10 Key Lock Adapter	KGP-2A/2B GPS Receiver / Modem Unit
KRK-10 Control Head Remote Kit (23ft/7m)	KAP-2 Horn Alert/Public Address Relay Unit	KLF-2 Line Noise Filter	KPS-10A DC Power Supply
KCT-46 Ignition Sense Cable	VGS-1 Voice Guide & Storage Unit		

All accessories and options may not be available in all markets.
Contact an authorized Kenwood dealer for details and complete list of all accessories and options.

Specifications

Model	TK-7180	TK-7180H	TK-8180	TK-8180H
GENERAL				
Frequency Range				
Type 1	136~174 MHz		450~520 MHz	450~512 MHz
Type 2	—		400~470 MHz	
Number of Channels*				
Zone		Max.128 per Radio		
Ch/GID		Max.250 per Zones		
		(Max.512 [Conv.Ch's +GID's] total per Radio)		
Channel Spacing				
Wide	25 kHz, 30 kHz		25 kHz	
Narrow	12.5 kHz, 15 kHz		12.5 kHz	
Operating Voltage		13.6 V DC±15 %		
Current Drain				
Standby	0.4 A	0.4 A	0.4 A	0.4 A
Receive	1.0 A	1.0 A	1.0 A	1.0 A
Transmit	9.0 A	13.0 A	9.0 A	13.0 A
Duty Cycle		Transmit: 20 %		
Operating Temperature Range		-22 °F ~ +140 °F (-30 °C ~ +60 °C)		
Frequency Stability		±0.00025 % (-22 °F ~ +140 °F)		
Antenna Impedance		50 Ω		
Channel Frequency Spread				
Type 1	38 MHz		70 MHz	
Type 2	—		70 MHz	
Dimensions (W x H x D), Projections not included		6-5/16" x 1-3/4" x 6-3/16" (160 mm x 45 mm x 157 mm)		
Weight (net)		3.3 lbs. (1.5 kg)		
FCC ID				
Type 1	K4437303110	K4437303210	K4437313110	K4437313210
Type 2—	—	—	K4437313120	K4437313220
IC Certification				
Type 1	282F-37303110	—	—	—
Type 2—	—	—	282F-37313120	—

*Maximum capability depends on the number of programmed Zone and repeater channels.

Applicable MIL-STD & IP

Standard	MIL 810C Methods/Procedures	MIL 810D Methods/Procedures	MIL 810E Methods/Procedures	MIL 810F Methods/Procedures
Low Pressure	500.1/Procedure I	500.2/Procedure I, II	500.3/Procedure I, II	500.4/Procedure I, II
High Temperature	501.1/Procedure I, II	501.2/Procedure I, II	501.3/Procedure I, II	501.4/Procedure I, II
Low Temperature	502.1/Procedure I	502.2/Procedure I, II	502.3/Procedure I, II	502.4/Procedure I, II
Temperature Shock	503.1/Procedure I	503.2/Procedure I	503.3/Procedure I	503.4/Procedure I, II
Solar Radiation	505.1/Procedure I	505.2/Procedure I	505.3/Procedure I	505.4/Procedure I
Rain	506.1/Procedure I, II	506.2/Procedure I, II	506.3/Procedure I, II	506.4/Procedure I, III
Humidity	507.1/Procedure I, II	507.2/Procedure II, III	507.3/Procedure II, III	507.4
Salt Fog	509.1/Procedure I	509.2/Procedure I	509.3/Procedure I	509.4
Dust	510.1/Procedure I	510.2/Procedure I	510.3/Procedure I	510.4/Procedure I, III
Vibration	514.2/Procedure VIII, X	514.3/Procedure I	514.4/Procedure I	514.5/Procedure I
Shock	516.2/Procedure I, II, III, V	516.3/Procedure I, IV, V	516.4/Procedure I, IV, V	516.5/Procedure I, IV, V
International Protection Standard				
Dust & Water Protection	P54: Radio itself P54/55: Remote Head with KRK-10			

*To meet above Mil810 and IP grade, weather proof microphone KMC-35 or KMC-36 has to be connected.

** Typical specifications
Kenwood follows a policy of continuous advancement in development. For this reason specifications may be changed without notice.

FleetSync® is a registered trademark of Kenwood Corporation.
LTR® is a registered trademark of Transcript International.

footnotes from Front:

- 1 KRK-10 remote control kit required.
- 2 DTMF includes PTT ID, Emergency ANI, Manual Encode (KMC-36), Auto-Dial (9 numbers) & Stun.
- 3 Special Alert Tone Patterns operate for 2-Tone, DTMF, FleetSync® selective call decode.
- 4 Call Key: 6 keys max.; operates for 2-Tone, DTMF and FleetSync status encode.
- 5 DB-25 ACC supports 15 Remote Zone/CH/GID selections, KGP-2A/B (KCT-40 required), KDS-100 (KCT-40 required), data modem, MDT, interconnect.
- 6 KCT-46 ignition sense cable option required; plugs into mobile ignition sense pig-tail cable.
- 7 KAP-2 required: Horn Alert operates for FleetSync®, 2-Tone or DTMF selective call decode.
- 8 KPG-89D required: Windows®98/ NT/ 2000/ Me/XP compatible; English/Spanish screen languages.
- 9 MIL-STD "Driven-Rain" and IP-55 Water/Dust Intrusion apply to remote control head only; IP54 applies to radio chassis.
- 10 Conventional Zones: 512 Channels (128 Zones max. per radio; 250 CH max. per Zone Trunked Zones: 512 GID / 128 Zones max. per radio; 250 GID max. per Zone).
- 11 Two-Tone Decode (4 sets x 4 pairs each); Single / Two-Tone Encode (32 tones), Operator Selectable Tone (40 QT.DOT code pairs).
- 12 Kenwood LTR® Features include: GID Delete/Add, LTR® Talk Around / Scan Revert Group Display, System Scan, Group Scan, Auto Search.
- 13 FleetSync® & FleetSync® II are not compatible.
- 14 Short Text Messages are radio stored & LCD displayed; Long Text Messages require a KDS-100 and KCT-40.
- 15 FleetSync® GPS features require an internal GPS board or externally wired GPS receiver with NMEA TTL level serial data output to the internal COM 1 or 2 set to "GPS".
- 16 Requires a VGS-1 option.

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